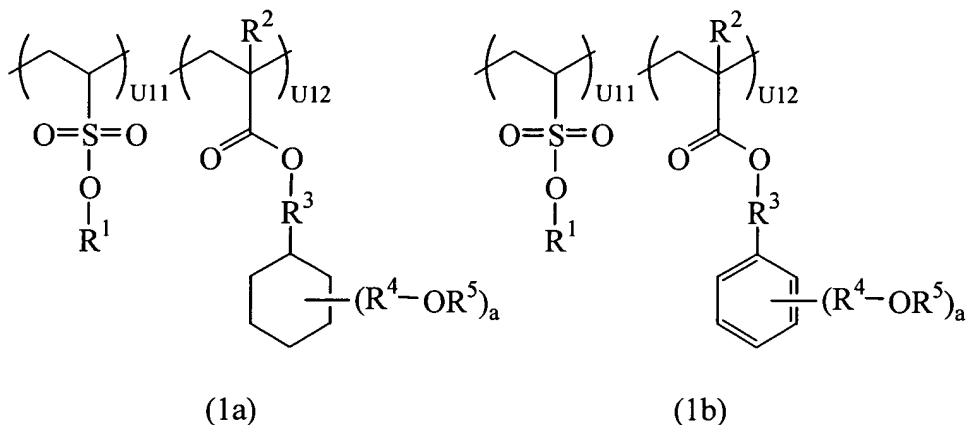


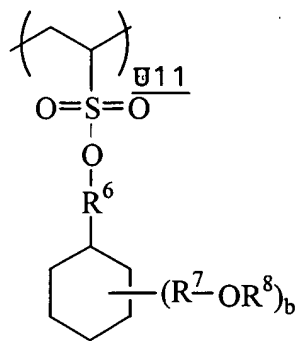
AMENDMENTS TO THE CLAIMS

1. (Currently amended) A polymer comprising recurring units of the following general formula (1a) or (1b) and having a weight average molecular weight of 1,000 to 500,000,

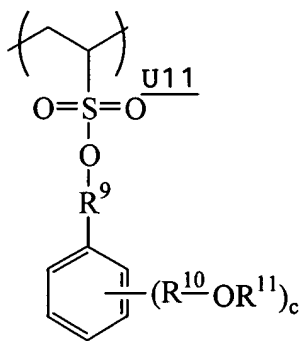


wherein R¹ is ~~an acid labile group, an adhesive group or~~ a straight, branched or cyclic fluorinated alkyl group of 1 to 20 carbon atoms which may contain a hydrophilic group such as hydroxyl, R² is hydrogen, fluorine or a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms, R³ and R⁴ each are a single bond or a straight, branched or cyclic alkylene or fluorinated alkylene group of 1 to 20 carbon atoms, R⁵ is hydrogen or an acid labile group, "a" is 1 or 2, U11 and U12 are numbers satisfying 0 < U11 < 1 and 0 < U12 < 1.

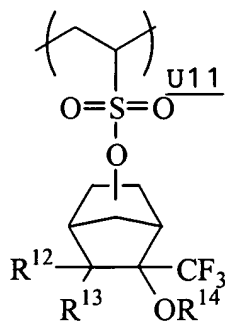
2. (Currently amended) ~~The polymer of claim 1 wherein the sulfonate units included in the formulae (1a) and (1b) are selected from the following general formulae (2a) to (2f):~~ A polymer comprising recurring units of the following general formula (2a) to (2f) and recurring units of the following general formula (1c) or (1c) and having a weight average molecular weight of 1,000 to 500,000,



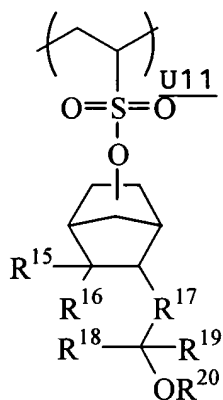
(2a)



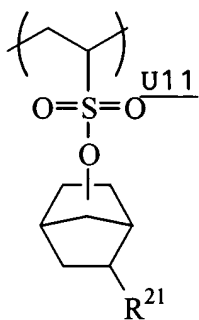
(2b)



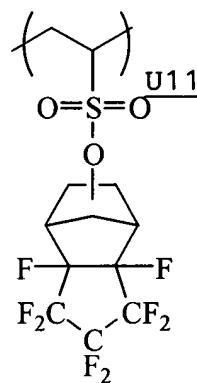
(2c)



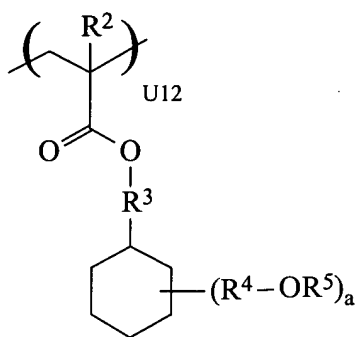
(2d)



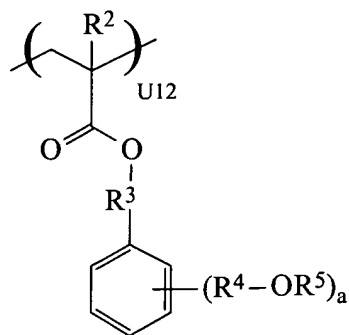
(2e)



(2f)



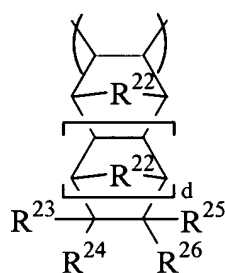
(1c)



(1d)

wherein R^2 is hydrogen, fluorine or a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms, R^3 and R^4 each are a single bond or a straight, branched or cyclic alkylene or fluorinated alkylene group of 1 to 20 carbon atoms, R^5 is hydrogen or an acid labile group, wherein R^6 , R^7 , R^9 , R^{10} and R^{17} each are a single bond or a straight, branched or cyclic alkylene or fluorinated alkylene group of 1 to 20 carbon atoms, R^8 , R^{11} , R^{14} and R^{20} each are hydrogen or an acid labile group, R^{12} , R^{13} , R^{15} , R^{16} , R^{18} and R^{19} each are hydrogen, fluorine or a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms, at least one of R^{18} and R^{19} contains at least one fluorine atom, R^{21} is a straight, branched or cyclic fluorinated alkyl group of 1 to 20 carbon atoms, "a" is 1 or 2, and each of b and c is 1 or 2, U11 and U12 are numbers satisfying $0 < U11 < 1$ and $0 < U12 < 1$.

3. (Currently amended) The polymer of ~~claim 1~~, claim 2, further comprising recurring units of the following general formula (3):

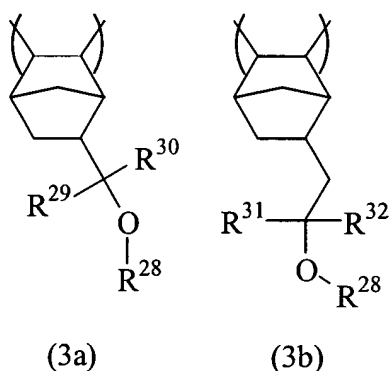


(3)

wherein R^{22} is a methylene group, oxygen atom or sulfur atom, R^{23} to R^{26} each are hydrogen, fluorine, $-R^{27}-OR^{28}$, $-R^{27}-CO_2R^{28}$ or a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms, at least one of R^{23} to R^{26} contains $-R^{27}-OR^{28}$ or $-R^{27}-CO_2R^{28}$, R^{27} is a

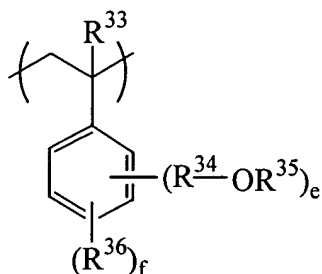
single bond or a straight, branched or cyclic alkylene or fluorinated alkylene group of 1 to 20 carbon atoms, R^{28} is hydrogen, an acid labile group, an adhesive group or a straight, branched or cyclic fluorinated alkyl group of 1 to 20 carbon atoms which may contain a hydrophilic group such as hydroxyl, and d is 0 or 1.

4. (Original) The polymer of claim 3 wherein said recurring units of formula (3) have a structure of the following general formula (3a) or (3b):



wherein R^{28} is as defined above, R^{29} to R^{32} each are hydrogen, fluorine or an alkyl or fluorinated alkyl group of 1 to 4 carbon atoms, at least either one of R^{29} and R^{30} contains at least one fluorine atom, and at least either one of R^{31} and R^{32} contains at least one fluorine atom.

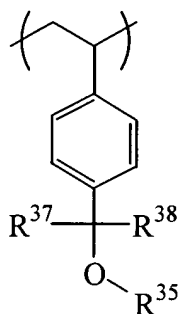
5. (Currently amended) The polymer of ~~claim 1~~, claim 2, further comprising recurring units of the following general formula (4):



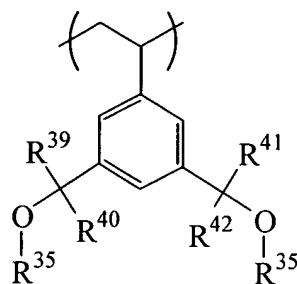
(4)

wherein R^{33} is hydrogen, fluorine or a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms, R^{34} is a single bond or a straight, branched or cyclic alkylene or fluorinated alkylene group of 1 to 20 carbon atoms, R^{35} is hydrogen or an acid labile group, R^{36} is fluorine or a straight, branched or cyclic fluorinated alkyl group of 1 to 20 carbon atoms, e is 1 or 2, and f is an integer of 0 to 4, satisfying $1 \leq e+f \leq 5$.

6. (Original) The polymer of claim 5 wherein the recurring units of formula (4) have the following formula (4a) or (4b):



(4a)

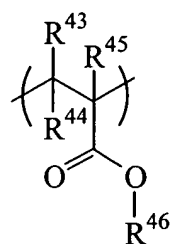


(4b)

wherein R^{35} is as defined above, R^{37} to R^{42} each are hydrogen, fluorine or an alkyl or fluorinated alkyl group of 1 to 4 carbon atoms, at least either one of R^{37} and R^{38} contains at least one

fluorine atom, at least either one of R³⁹ and R⁴⁰ contains at least one fluorine atom, and at least either one of R⁴¹ and R⁴² contains at least one fluorine atom.

7. (Currently amended) The polymer of ~~claim 1~~, claim 2, further comprising recurring units of the following general formula (5):



(5)

wherein R⁴³ to R⁴⁵ each are hydrogen, fluorine or a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms, and R⁴⁶ is hydrogen, an acid labile group, an adhesive group or a straight, branched or cyclic fluorinated alkyl group of 1 to 20 carbon atoms which may contain a hydrophilic group such as hydroxyl.

8. (Original) The polymer of claim 7 wherein R⁴⁵ in formula (5) is trifluoromethyl.

9. (Currently amended) A resist composition comprising the polymer of ~~claim 1~~ claim 2.

10. (Original) A chemically amplified positive resist composition comprising

(A) the polymer of claim 1,

(B) an organic solvent, and

(C) a photoacid generator.

11. (Original) The resist composition of claim 10, further comprising (D) a basic compound.

12. (Original) The resist composition of claim 10, further comprising (E) a dissolution inhibitor.

13. (Original) A process for forming a pattern comprising the steps of:

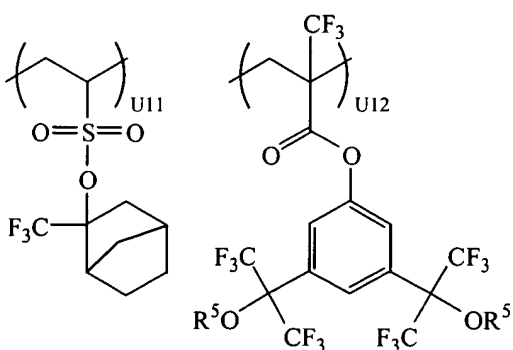
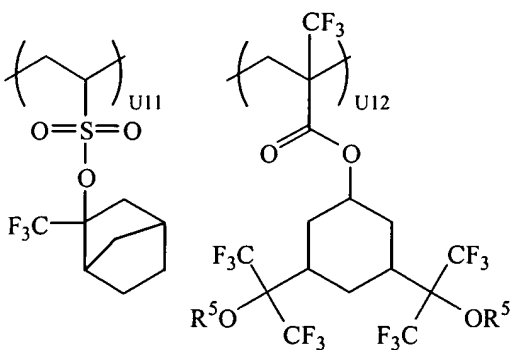
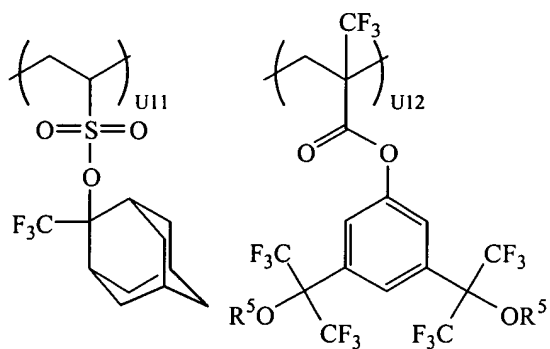
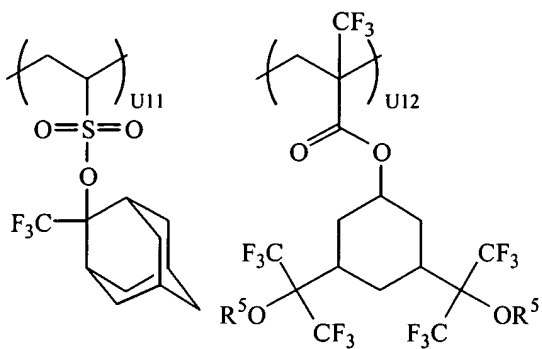
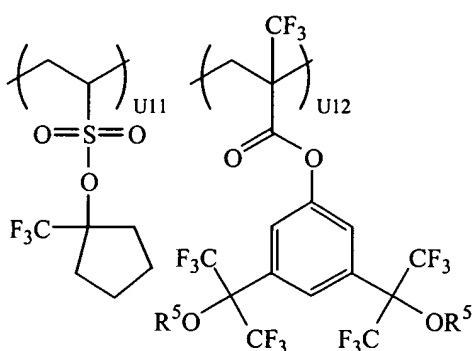
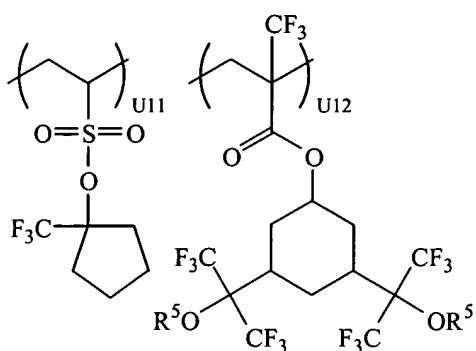
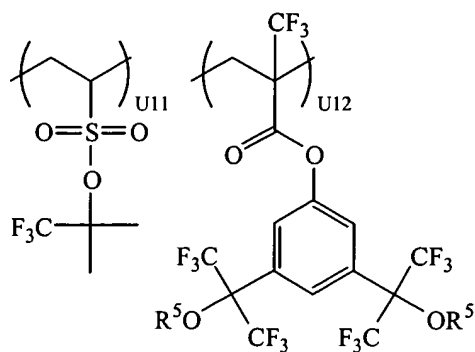
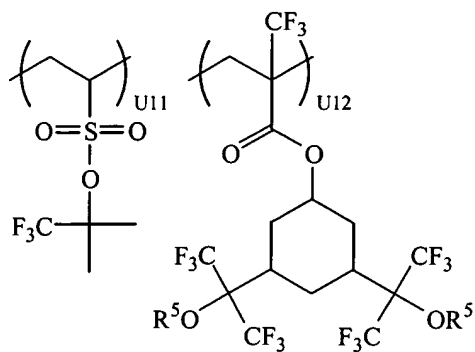
applying the resist composition of claim 9 onto a substrate to form a coating,

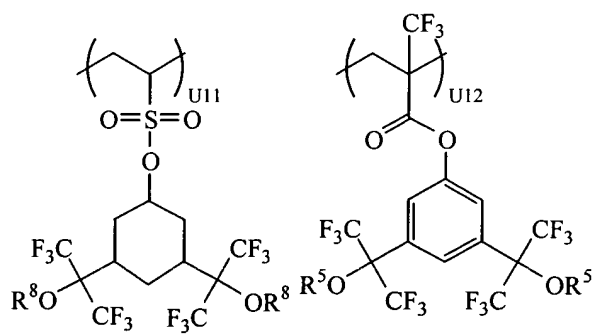
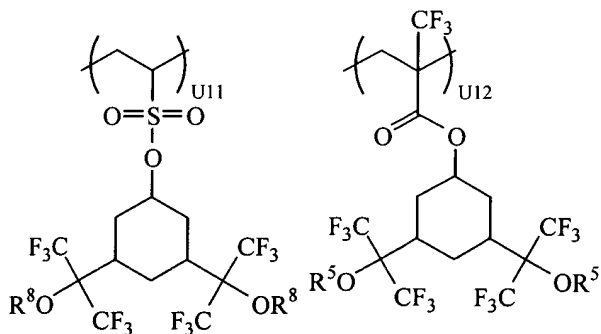
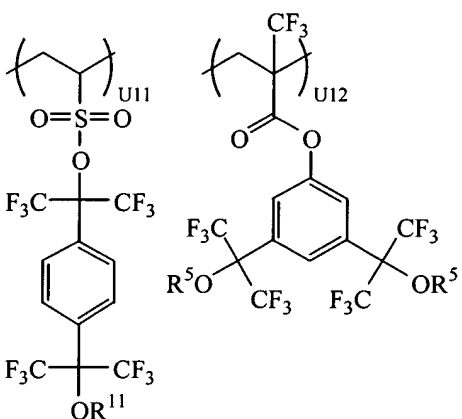
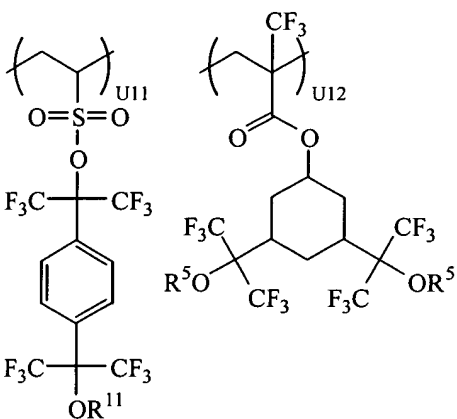
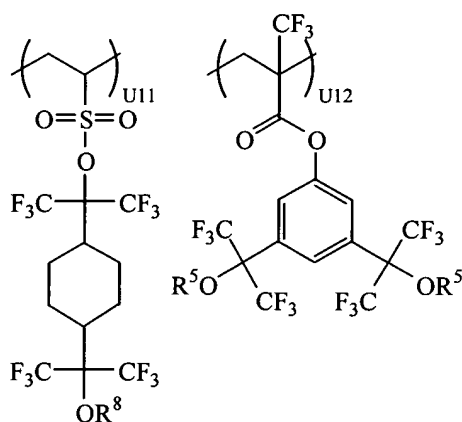
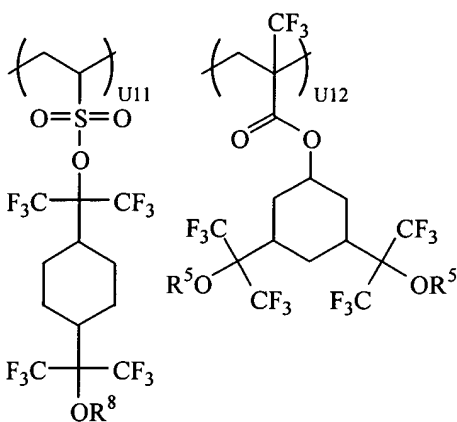
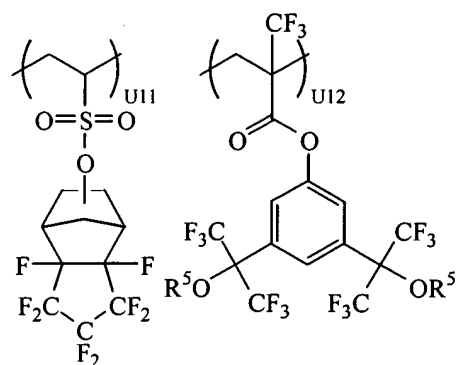
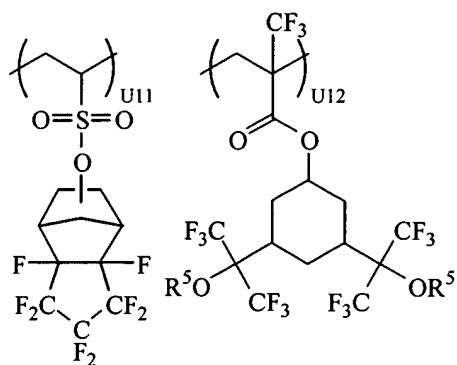
heat treating the coating and then exposing it to high-energy radiation in a wavelength band of 100 to 180 nm or 1 to 30 nm through a photomask, and

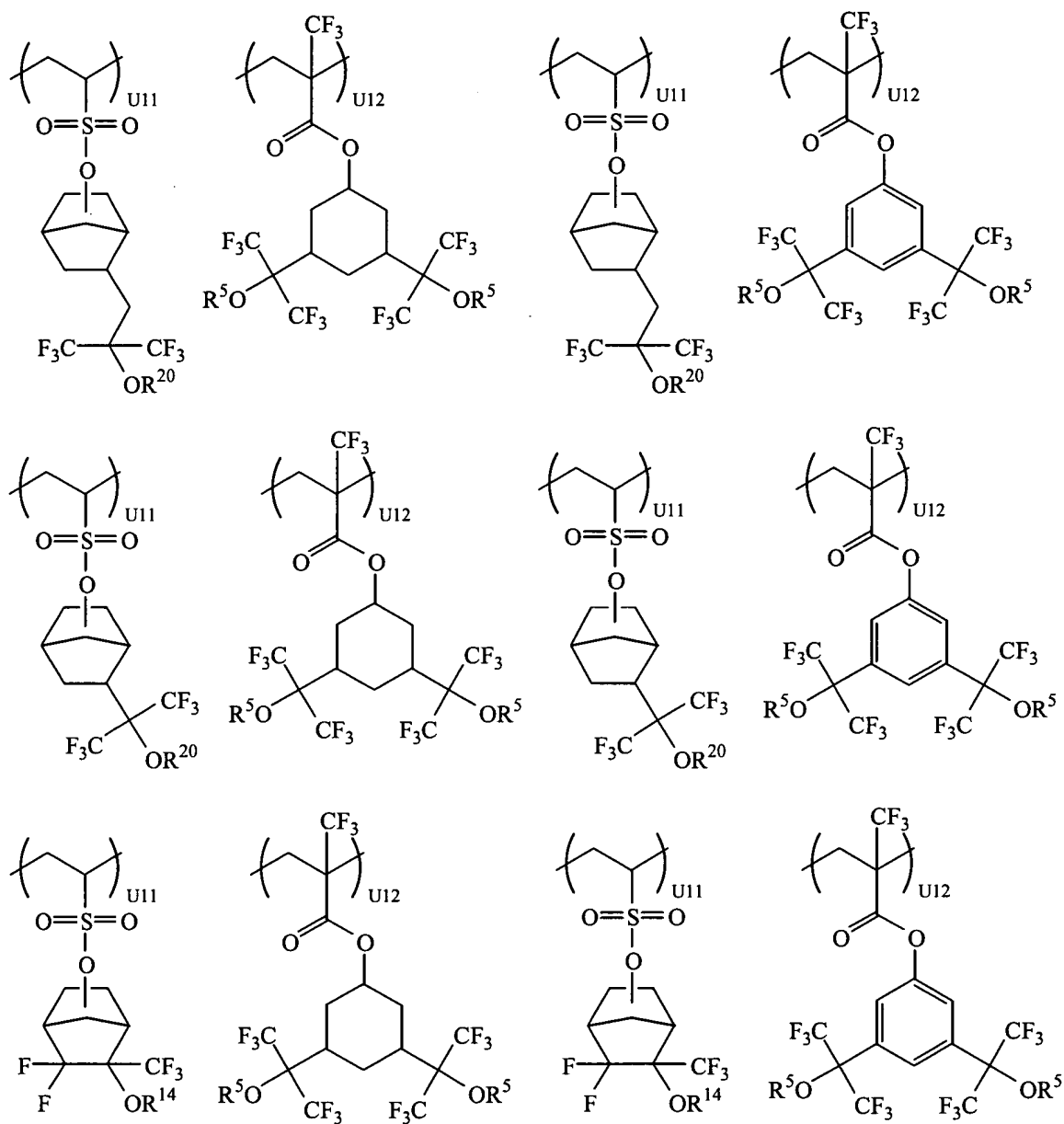
optionally heat treating the exposed coating and developing it with a developer.

14. (Original) The pattern forming process of claim 13 wherein the high-energy radiation is an F₂ laser beam, Ar₂ laser beam or soft x-ray.

15. (New) A polymer comprising recurring units selected from the group consisting of the following general formulae and having a weight average molecular weight of 1,000 to 500,000,



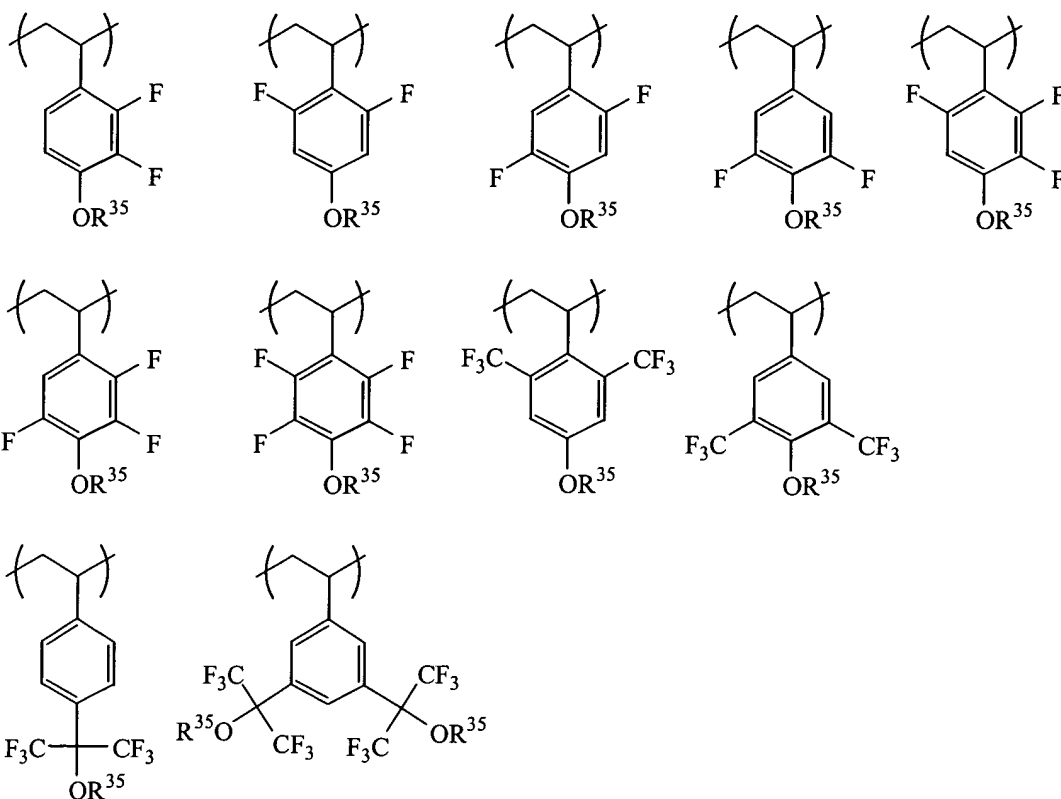




wherein R⁵ is hydrogen or an acid labile group, R⁸, R¹¹ and R²⁰ each are hydrogen or an acid labile group, U11 and U12 are numbers satisfying 0 < U11 < 1 and 0 < U12 < 1.

Birch, Stewart, Kolasch & Birch, LLP

17. (New) The polymer of claim 15, further comprising recurring units selected from the group consisting of the following formulae:



wherein R^{35} is hydrogen or an acid labile group.